

DESCRIPTIONS OF SOME GYNANDROMORPHS AND PTERERGATES (ANTS).

By DESMOND P. WALLS.

1. GYNANDROMORPH: *Formica fusca*, L., taken (winged) 13th July 1942 at Barren Hill, Howth, in a nest which contained many winged females, but no males.

General appearance intermediate between male and female.

Antennae distinctly female (shape, number of joints, etc.).

Head almost normal female, but somewhat smaller than normal, and less shining. Eyes female, ocelli distinct. Left mandible small; right normal female.

Thorax almost normal male, dull. Legs more male in colour, but more sturdy than normal male. Wings male. Pedicel male.

Gaster more or less male in shape, with sex segments, but more bulky than male. The gaster is distinctly deformed, terminating in *large* external male genitalia, which are twisted at right angles, to the right-hand side.

Length, 9 mm.

I kept this ant alive until 27th July. Its gait and whole behaviour were female.

17th July. Gynandromorph placed with two *fusca* queens, who had laid a few eggs. The gynandromorph was later seen to lick its companions.

18th July. Gynandromorph spread wings.

19th July. Gynandromorph with only one forewing and one hindwing. Gynandromorph carried packet of eggs.

27th July. Gynandromorph dead, with no wings.

2. GYNANDROMORPH: * *Myrmica ruginodis*, Nyl., in nest on Ireland's Eye, August 1942.

Winged (completely). Antennae and head entirely normal female. Thorax, as far as epinotum, female, rather light in colour. Epinotum quite smooth, having no spines, but small knobs as in the male. Legs female.

Petiole, post-petiole and gaster entirely male; the genitalia, however, are rather less prominent than normal.

Length, 5-6 mm.

PTERERGATES: *Myrmica ruginodis*, Nyl., born in captivity, June 1942.

A. Size as large as female. Head very large, fairly dark; gaster brown; otherwise yellow. Thorax worker, but shoulders enlarged; thorax on the whole *slightly* enlarged, suture behind mesothorax very distinct. Remnant of left forewing, stringy, about 1 mm. long. Very small right forewing remnant, but this may have been broken in examining the specimen. Gaster almost as large as female.

Length, 6 mm.

B. Head as in A, but darker; body darker than in A. Thorax intermediate in bulk between worker and female; suture very marked;

but general appearance is worker. Very slight trace of right forewing; stringy remnant of left forewing, 2-3 mm. long.

Length, 6 mm.

C. Head dark, as large as female; gaster fairly large; thorax slightly larger than normal worker, but no wing remnants.

Length, 6 mm.

D. Almost identical with C.

The four ants described above (A, B, C, D) were all reared with female pupae, and workers of normal size did not develop until somewhat later. I had, in another *ruginodis* nest in 1942, a number of large workers of this type reared, contemporaneously with the batch of female pupae, turning brown at the same time, etc. These last facts seem to me to be the most important, and not the actual presence of wing-remnants, etc. It was only on close inspection that these "pseudo-female" pupae could be seen to be wingless.

N.B.—A, B, C and D above had ocelli exactly as in female.

PTERERGATES OF *MYRMICA SCABRINODIS*, NYL. Born in Lubbock nest in which I had also a small colony of *F. fusca*. (I wished to see whether these species could live together amicably. The *fusca* were continually offensive, however, and eventually both species dwindled almost to nothing.)

These Pterergates were reared with some normal winged females. All were large, i.e., of female size.

(a) Two small knob-like remnants of forewings; stringy remnant of left hindwing; tiny trace of right hindwing.

(b) Small projecting remnants of hindwings; slight traces of forewings.

(c) No wing traces; is peculiar in having thorax light above dark below.

(d) Light colour above; head, gaster, lower part of thorax dark; thorax slightly twisted, head inclined to left side; no wing traces.

(e) All dark; trace of left forewing and right hindwing.

*This brings the total of described Gynandromorphous Ants up to 67 to date.—H.D.

COLLECTING NOTES.

"*CYNTHIA HAMPSTEDIENSIS*."—I agree with Mr Hudson that *Cynthia hampstediensis*, Stephens 1827, was a *Precis* (*Junonia*) agreeing with *villida*, Fb., so far as can be judged from the copies of *Petiver's* figures in (1) Mr Allan's book and (2) Stephens' *Haustellata* I, t. 5, ff. 3, 4. The figure given in Humphreys and Westwood, *British Butterflies*, t. 14, f. 7 (1841), is much more vividly coloured: of this Humphreys said (p. 52) that it had "the air of a species or variety of *Hipparchia*"; but Westwood, with more knowledge of Exotic Butterflies, stated (p. 80) that he had "no doubt that it is an exotic species which had been accidentally brought to this country . . . it is evidently allied to *Cynthia orithya*" [now placed in *Precis*].